AOMEI® Partition Assistant® 5.5

User Manual

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Welcome

About AOMEI Partition Assistant

AOMEI Partition Assistant is a highly-efficient, easy-to-use and multifunction partition management software, with user friendly operations to assist you mange the partitions of your hard drives. Under the help of Partition Assistant, you can easily & fast create/delete and merge/split the partition and the most advantage is that it resize/move your partition to readjust the partition volume on the basis that it ensures the security of your data.

Main Capabilities：

- Extend/Shrink partition
- Resize/Move partition
- Merge/Split partition
- Allocate Free Space
- Copy disk/partition
- Create/delete/format partition
- Set partition label
- Wipe partition/wipe hard drive
- Rebuild MBR
- Convert to GPT/MBR disk
- Disk surface test
- View properties of partition and disk

Advanced Capabilities:

- Change and Remove drive letter
- Hide and Unhide drive
- Convert Logical to Primary or contrary
- Set drive as active
- Convert between FAT32 and NTFS
- Check and fix partition
- Wipe unallocated space
- Change partition type and change serial number
- Partition Alignment

Disk & Partition Wizard:

- Extend Partition Wizard
- Disk Copy Wizard
- Partition Copy Wizard
- Migrate OS to SSD or HDD
- Partition Recovery Wizard
- Create Bootable CD Wizard
- Windows To Go Creator

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Working Computer Configuration

Minimum Hardware requirements:

- 500 MHz x86 or compatible CPU
- 256MB RAM memory
- Mouse and Keyboard

Recommended Hardware requirements:

- 1 GHz x86 or compatible CPU
- 512mb RAM memory
- Mouse and Keyboard

Supported Hardware Environment: Partition Assistant supports all the storage devices which can be recognized by Windows, such as IDE, SATA, SCSI, SSD, USB external disks, flash drive, Fire wire disk, Hardware RAID and Flash drive and so on. It is able to support MBR (under 2TB) and GPT (larger than 2TB) with 128 hard disks, with file system FAT, FAT32, NTFS and also EXT2, EXT3.

Operating Systems Supported: Partition Assistant supports different versions of Windows depending on different software editions. In general, it works on Windows 2000/XP/Vista/7/8/8.1, Small Business Server 2011/2003/2008, Windows home server 2011 and Windows Server 2003/2008/2012 (both 32bit and 64bit).

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Product Main Window

AOMEI Partition Assistant works with a main interface, with menu bar, tool bar, disk panel, and sidebar and partition list. The main interface includes the number of disks, partition info, like drive letter, label, file system, status and free space, which indicates the related information of the selected disk partition with a specific image.

You can click the menu or sidebar to select the partition operations. In addition, some option availabilities (e.g. submenu) will be dependent on your choices. If you need to refresh the interface, just press F5 to reload the disk devices.

Partition Operation Properties

Displaying operation results

Results of any disk partition operation are immediately displayed in the Partition Assistant main window. If you create a partition, it will be immediately shown in the disk partition list, as well as in graphical disk panel at the bottom of the main windows. Any partition changes, including resizing, moving and labeling are also immediately displayed in the main window.

Pending operations

- All operations are pending until the user issues the command for the changes to be made permanent. Until then, Partition Assistant will only show the results that are provided by operations. Therefore, you can preview the latest changes first and then decide whether to perform or cancel specific operations.

- All pending operations are added to a pending operations list. You can view it in the Pending Operations List by clicking **System** -> **Apply**. Partition Assistant enables you to control all planned operations by using **System** -> **Undo** (Ctrl + Z) or **Redo** (Ctrl + Y) or discard all operations (Ctrl + D).

- To commit pending operations, the user has to click the menu **System** -> **Apply** -> **Proceed**. To prevent you from performing any unintentional change on your disk, the program will prompt you confirm the tasks when clicking the **Proceed** button.

Note
You must click **Apply** (Ctrl + Enter) -> **Proceed** to take effect the all pending operations.

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Partition Operations

Resize and Move Partition

Along with data increased and application installed, when you write data to the partition again, you may find there is no more disk space to hold your new data. Partition Assistant allows you expand the partition of the low disk space safely, and also you can shrink partition and move partition.

1. Select the partition that you want to resize in main window, and click the **Resize Partition** option in shortcut menu to invoke the Resize and Move Partition dialog.
2. In the dialog, you can adjust the size and location of the partition by the following ways:
   a) Directly enter a proper size into the Input Box field to adjust the partition.
   b) Move the mouse pointer to the graphical Partition Bar, and then drag the corresponding partition rectangle until you get the proper size in the Partition size field when the mouse pointer changes to a double-headed arrow or square-headed arrow.

      In addition, if you are using Solid State Drive, we suggest you click **Advanced** button, and then select "partition alignment for SSD". This feature could speed up SSD's read and write speeds, improve the performance of SSD. Note here the partition will be aligned, only when you moving partition. If you just extend/shrink partition, but not move the partition, the partition would still not be aligned. Also, if you tick at the option, the program will preserve partition alignment when an aligned partition is resized or moved.

3. By clicking OK a partition resizing or moving operation will be added to pending operations list, and the new partition structure will be graphically represented in the Partition Assistant main window.

Note:

- Resize partition has a wizard, which can automatically perform more complex partition extending with restarting computer no required. Simple partition resizing lets you increase partition size only if there is free (unallocated) space after a partition. You can invoke the wizard by clicking **Wizard** -> **Extend Partition Wizard** in menu bar.

- Take special care when moving an operating system partition and its boot code location. The OS might stop booting. For example, Windows NT 4.0 and earlier versions limit boot code location to the first 2016 MB.

- After moving or resizing the partition with restore point, you may lose the restore point created by Windows System Restore before.

- In order to protect your system or boot partition, you could not move system/boot partition

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directly; if you need to move system/boot partition (for example if the system/boot partition is at the end of the hard disk) you must tick “I need to move this partition”, and then you could move it.

Merge Partitions

With the help of Partition Assistant, you could merge two partitions into one without losing data.

1. Right-click the partition you want to merge, select “**Merge Partitions**”.
2. In the pop-up window, select the two partitions that you want to merge. And also select one partition as the target partition. Then Click “OK”
3. Immediately click **System** -> **Apply** -> **Proceed** to execute the merging operation.

Note:

- You could also merge any unallocated space into any existing partition.
- Partition Assistant could support at maximum two partitions merging every time.
- To merge partitions, the two partitions must be adjacent.
- You could merge data partition into system partition, but could not merge system partition in to data partition.
- In Windows 7 the “system reserved” partition could not be merged.

Split Partition

Split Partition-a special function of Partition Assistant, with the help of this function, you could quick partition one hard drive into several partitions.

To split partition

1. There are two ways to split partition:
   1) Just from the keyboard input: select the partition which you want to split and then directly press **Enter** key -> enters a proper value as new partition size -> press **Enter**. You can also rapidly repeat clicking **Enter** key to split it into several partitions quickly and commit the changes by pressing **Ctrl + Enter**.
   2) Right-click one partition that you want to split, select **Split Partition**. In the pop-up window, move the mouse to the separation, and drag it rightwards or leftwards, to specify the size of the new partition and the original partition. Then Click “OK”.

      For advanced settings. In the popup window, by clicking the **advanced** button, you could specify partition label, partition type (Primary/Logical) to the new partition. More advantage is that if you are using Solid State Drive (SSD), you could align the partition by selecting **SSD partition alignment**. It could help you speeding up Solid State Drive’s (SSD) read and write speeds, improving SSD performance.

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2. Immediately click **System** -> **Apply** -> **Proceed** to execute the splitting operation.

Note:

- When there are four primary partitions on a disk, if you want to split one of them, the partition that is being split will be converted to logical partition automatically.

- If one disk has four primary partitions, the program does not allow you to split the system partition or boot partition. Here, you could convert one of other partitions from primary to logical partition, and then the program will allow you to split system partition.

Allocate Free Space

"Allocate Free Space" could help you quickly move free space from one partition to another partition in order to increase the target partition size.

1. Right-click one partition as a source partition, select "Allocated Free Space".
2. In the pop-up window, specify the free space to the target partition. You could type the free space that you want to add into the target partition, and you could also set a partition as the target partition.
3. Click "OK" then you will back to the main interface of PA and click "Apply" on the tool bar to commit the operation.

Note:
After execute the allocation operation, the program will take some free space from the source partition to the target partition. In other words, the source partition will be shrunk, and the target partition will be expanded.

Copy Partition

Partition copy could backup all your data on the drive include recoverable data which means the data that have been deleted or formatted maybe by mistake or virus affection, etc.

1. Select a partition you want to copy as the source partition. Right-click the partition and select "**Copy Partition**"

2. In the pop-up window, there are two partition copy methods: "**Copy Partition Quickly**" and "**Sector-by-Sector Copy**". The former only enables you to copy used space of the partition, the latter allows you to copy all sectors of the partition, no matter whether it is used or not.

1) "Copy Partition Quickly": the unallocated space could be smaller than the source partition but must be larger than the used space.

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2) "Sector-by-Sector Copy": the unallocated space must be equal or larger than source partition.

Choose the method you want and click **Next** to continue;

3. Select the appropriate unallocated space as destination partition. Note: there is an option -- **Optimize performance for SSD**. This feature could help you speeding up Solid State Drive's (SSD) read and write speeds, improving SSD performance. If you fit that detail, select this option, and then click **Next** to continue.

4. Adjust the destination partition (Note: if there were three primary partitions, you could only create as logical partition).

5. Click **Finish**, and click **Apply** button on the toolbar to commit the copy operation.

Note:

- Only unallocated could be set as destination partition.
- Partition copy has a wizard which could help you automatically perform more complex copying partition. You can invoke the wizard by clicking **Wizard** -> **Partition Copy Wizard** in menu bar.

Create Partition

1. There are three ways to create partition:
   - The quickest way: select the segment of unallocated space and then directly press **Enter** key -> directly enters a proper value as the new partition size -> press **Enter**. You can also rapidly repeat clicking **Enter** key to create several partitions quickly and commit the changes by pressing **Ctrl + Enter**.
   - Select the segment of unallocated space which you would like to create a partition on by clicking the Unallocated Space in the main window. The **Create Partition** button will become available on the sidebar and in the context menu of the right click.
   - If there's no unallocated space you could also create partition. Select the partition which has a lot of free space and then right click the partition -> **Create Partition** or in the left panel select **Create Partition**, the software will take some free space from the selected partition to create a new partition.

2. In the **Create Partition** dialog, enter a proper value as new partition size, assign a drive letter and select a file system to the will create partition. Meanwhile, you could also drag and move the graphical Partition Bar to change the partition size or location on the disk.

3. For advanced settings. In the **Create Partition** dialog, by clicking the **Advanced** button at the left bottom, you could specify partition label, partition type (Primary/Logical) and adjust the partition location by setting unallocated space before/after. What more advantage is that if you

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are using Solid State Drive (SSD), selecting “SSD partition alignment” is quite necessary. Because this feature could improve the performance of SSD.

4. By clicking OK, you'll add the pending operation of new partition creation, and the new partition structure will be graphically represented in the Partition Assistant main window.

Note:

- As a rule, Primary is selected if a partition is to install an operating system. If a partition is meant for data storage, Logical should be selected. You could also use PA to change the partition flag between primary and logical.
- To select a file system, we recommend you select NTFS to format when your partition is created on a fixed disk device, because FAT32 supported the max file is 4GB, so a greater than 4GB file need to be divided multiple small files to store on FAT32.
- Could support to create EXT format partitions under Windows, but Windows is not unable to recognize EXT format partitions.

Delete Partition

After delete a partition, its space is added to unallocated disk space. It can be used to create a new partition or to extend an existing partition.

1. Select the partition that you want to delete in main window.
2. By clicking the **Delete Partition** command in right menu or toolbar.
3. Select the deletion method in the Delete Partition dialog, you can:
   - Just delete a hard disk partition (without wiping disk sectors)
   - Delete a hard disk partition and fully wipe partition sectors (The all sectors of the partition will be full 0). The data recovery software cannot recover the data on the partition by the deleting method.

4. By clicking OK you'll add a pending operation of partition deletion, and the new disk layout will be graphically represented in the main window.

Note:
The program does not allow you delete the current system partition and boot partition.

Format Partition

Format is designed to change the file system or cluster size of the partition in order to re-arrange the format of the stored data, but the original format and data will be destroyed.

1. Select the partition that you want to format in main window, and click the **Format Partition** command in shortcut menu to invoke the Format Partition dialog.

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2. In the dialog, enter the partition label, and select a file system of your desired (e.g. FAT32 or NTFS). For the cluster size (with Default, 512 bytes, 1, 2, 4… 64 KB), having selected Default, Partition Assistant will automatically determine the cluster size depending on selected file system and partition size, and the Default option is recommended.

3. By clicking OK a partition formatting operation will be added to pending operations list.

Note:

- Partition formatting destroys all its data, including files and folders! Take special care when performing the operation.
- The smaller of the cluster size may let your partition generate many file fragments during the process of the data read-write. The bigger cluster may waste less disk space. We suggest you use this default value.
- If you may need to save some big files greater than 4GB to the partition, we suggest use NTFS to format due to the 4GB limitation of FAT32.

Change Label

Partition label is an optional name assigned to a partition for easier recognition of your partitions. For example, one could be called Windows XP which represents a partition with an OS, Games which represent a pastime partition, etc.

To change a partition label:

1. Select a partition which label needed to change, and click the **Change Label** option in shortcut menu to invoke the Partition Label dialog.
2. Enter a new label in the Input Box field.
3. By clicking OK you'll add a pending operation, and the new partition label will be graphically represented in the Partition Assistant main window.

Note

- In Windows, partition labels are shown in the Explorer disk and folder tree: System (C:), Work (D:), etc. System and Work are partition labels.
- For FAT/FAT32 partition, the label can be set up to 11 characters, but in NTFS, the partition label is up to 32 characters.

Wipe Partition

Any existing partition can be erased permanently. Ensure that the data can not be recovered by any data recovery solution. This function can prevent undesired recovery of your deleted data.

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To wipe partition

1. In the disk map, select the disk which you want to wipe;
2. By right clicking the partition select **Wipe Partition** or in the left disk option panel select **Wipe Partition**;
3. In the popup window, enter a proper value. This value means how many times you want to wipe this partition. Click **OK** to continue;
4. Click **Apply** button on the toolbar to commit this operation.

Note:
You can specify the number of times to wipe from 1 to 100.

Change Drive Letter

Windows assign drive letters (C: D :,…) in order to access the files or folders on the drive.

To change a letter assigned to a partition:

1. Select a partition which drive letter needed to change, and click the **Advanced** -> **Change Drive Letter** option in shortcut menu to invoke the related dialog.
2. Specify the new drive letter to assign to the partition by clicking drop down list. The partition letter will be deleted if you selected the new letter is None.
3. By clicking OK this will add a pending operation, and the new drive letter will be represented in the main window.

Note:
Directly changing a partition letter might affect some shortcuts or applications are unavailable.

Hide and Unhide Partition

You can hide or unhide partitions easily with Partition Assistant. After hiding partition, the drive letter will be removed; the mean is you can not access the data on the partition by My Computer - Explorer.

To hide or unhide partition:

1. Select a partition which you want to hide and click the **Advanced** -> **Hide/Unhide Partition** option in shortcut menu to invoke the related dialog.

2. By clicking OK this will add a pending operation, and the changes will be represented in the main window.

Note:
The hidden partition in the system is not available for use. If you want to use it again, you should unhide this partition. Moreover, after hiding, you are unable to assign drive letter because

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Windows does not allow. Unhide will reallocate a drive letter to the partition for use.

Set Active Partition

Typically, your disk always has only active partition. A Windows operating system need to be booted from the active partition, therefore, it is very important. If you have several primary partitions on a disk, you must specify one to be the boot partition. For this, you can set a partition to active, and then this will make that the partition is able to boot an OS. Besides, a disk can have only one active partition.

To set active partition:

1. Select a primary partition which you want to active, and click the **Advanced** -> **Set Active Partition** option in shortcut menu to open the related dialog.

2. By clicking OK this will add a pending operation, and the changes will be represented in the main window.

Note:

- Before you make a partition active, you must make sure it is formatted and contains an operating system, or contains boot.ini file or BCD file under Boot folder. Otherwise your PC will not boot from this partition!
- Setting the partition as active will cause another primary partition to change to inactive.

Convert Partition to NTFS

This function will convert FAT partition to NTFS partition. To do this, you can improve the partition performance.

File system conversion steps:

1. Select a FAT12, FAT16 or FAT32 partition that you want to convert to NTFS, and click Convert Partition option in right menu -> **Advanced** -> **Convert to NTFS**.
2. By clicking OK, and immediately click **System** -> **Apply** -> **Proceed** to execute the conversion.

Note:

If the conversion is failed by using Partition Assistant, please use Windows built-in the command convert.exe to FAT to NTFS in command line prompt.

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Convert Primary/Logical Partition

If there are four primary partitions on a disk, you will unable to create other new partitions. Here, you must convert one of them to logical partition. Partition Assistant supports convert between logical partition and primary partition.

1. When a selected partition is logical partition, right-click it and select the menu option "Advanced -> **Convert to Primary**" in order to convert it to primary partition. (Note: If the selected partition is a primary partition, right-click and select "Advanced -> **Convert to Logical**".)
2. In the pop-up window click "OK" to affirm the conversion.
3. Click Apply on the toolbar to commit the conversion operation.

Note:
System partition or boot partition can not be converted from primary to logical.

Wipe Data

Wipe Data can erase the data completely and ensure that the data can not be recovered by any data recovery solution. This function can prevent undesired recovery of your deleted data.

To wipe data

1. In the disk map of the main console, select an unallocated space which you want to wipe data;
2. By right clicking the unallocated space select **Wipe Data**;
3. In the popup window, enter a proper value. This value means how many times you want to wipe this unallocated space. Click **OK** to continue;
4. Click **Apply** button on the toolbar to commit this operation.

Note:
You can specify the number of times to wipe from 1 to 100

Change Partition Type ID

Change partition type to any other type in the list, it may cause some operating system could work with these partitions. Please exercise caution to perform this operation.

To change partition type

1. Select the partition to change partition type;
2. Select new partition type, click "OK" to continue;
3. Click **Apply** on the toolbar to commit the change partition type operation.

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Change Serial Number

The feature could help you change the partition serial number. But note that if you have no need to change it or not clear about the use, you'd better not to change it, since it may cause system not boot or work incorrectly. Please exercise caution to perform this operation.

To change serial number

1. Select the partition which you want to change serial number;
2. Right-click the partition select **Change Serial Number;**
3. Revise your partition serial number and click "OK" to continue;
4. Click **Apply** on the toolbar to commit the changes.

Partition Alignment

Partition alignment can speed up Solid State Drive's (SSD) read and write speeds. Especially when SSD was used as system drive, it could help you improve the overall performance of system.

To align partition

1. First select the first partition on the disk, right-click the partition select **Advanced** -> **Partition Alignment**;
2. Set partition alignment to the default sector or other sectors (2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, 2048, 4096) in the drop-down menu. (Default "Optimized" is aligned to 2048 sector) and then click **OK** to continue;
3. Click **Apply** on the toolbar to commit the changes.

Note:

- When you perform partition alignment, the program will automatically detect whether the partition has aligned. If prompt you "the current partition is already optimized", at that rate you do not need to align it again.
- Firstly you need to align the first partition and then to align other partitions one by one.

Check Partition

For a formatted partition, the Check Error can discover some errors of the file system to ensure the integrity of your data files. And on a disk or any partition, the function will scan each disk sector status by reading data from the sector.

Check Steps

1. Select the disk, the partition or an unallocated space that you want to check in main window, and click the Check Partition option in the left sidebar.
2. Pick a check method in the **Check Error** dialog, you can:

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- Check partition and fix errors. If there are some errors in the partition, the errors will be fixed automatically by AOMEI Partition Assistant.
- Check the file system by using Windows built-in chedsk.exe. This will discover any problem, and you also can use chkdsk.exe /F in CMD to amend the discovered errors.
- Check whether has bad sectors or not. This is a disk surface test, which will scan the selected disk space. Disk block no error will mark as green color and disk block with reading error will mark as red color.

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Disk Operations

Copy Disk

Disk copy could assist you copy all the information include recoverable data from old disk to new disk easily.

1. Select a disk in the drive list to copy. Right-click disk and select "**Copy Disk**", you could also click the "**Disk Copy**" at the left side Disk Operations list.

2. After step1 you will see two method of copy disk: "**Copy Disk Quickly**" and "**Sector-by-sector copy**". Select an appropriate method and then click "**Next**".
   1) "Copy Disk Quickly": only copy used space of the disk to another disk. The destination disk could be smaller than source disk but must be larger than the used space.
   2) "Sector-By-Sector Copy": copy all sectors of the disk to a target disk no matter whether it is used or not. The destination disk must be equal or larger than source disk.

3. In the next page choose a target disk on the disk map to copy the source disk. Note: there is an option -- **Optimize performance for SSD**. This feature could help you speeding up Solid State Drive's (SSD) read and write speeds, improving SSD performance. If you fit that detail, select this option. In addition all data on target disk would be deleted after committing the copy operation. Please click "**Next**" to continue.

4. Then it will pop up a dialog box to remind you "All data on this selected destination disk will be destroyed after you save this operation…" Just click "**YES**" to confirm and go to the next page.

5. In this page you could adjust the partition size by select three different Copy Options: "**Copy without resizing partitions**" "**Fit partitions to entire disk**" and "**Edit partitions on disk**". Choose the appropriate method and click "**Next**".

6. In the pop up dialog box it will remind you "How to boot operating system from the destination disk". Click "**Finish**", and click **Apply** button on the toolbar to commit the copy operation.

Note:
- All data on target disk would be deleted after copy the source disk.
- Dynamic disk, GPT disk and Offline disks could not be set as target disk
- Disk copy has a wizard which could help you automatically perform more complex copying partition. You can invoke the wizard by clicking **Wizard** -> **Disk Copy Wizard** in menu bar.

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Surface Test

This feature could let you perform a scan on hard drive to looking for bad sectors. When a hard drive is manufactured, it usually contains some bad sectors. Over time, more can develop. And if data stored in these area it could be corrupt or lost, so to check the bad sector is needed.

Steps to perform surface test.

1. Select the disk which you want to test;
2. Right click the disk, select **Surface Test**;
3. In the popup window directly click **start** or by clicking **quick check** to perform a quick scan.

Note:
This feature could find out the bad sectors, but to repair the errors you need use the **SCANDISK** tool or other special software.

Rebuild MBR

Rebuild MBR could fix the corrupt Master Boot Record, let computer boot correctly. It may help you solve the problem like “operating system not found” or blank screen.

To rebuild MBR

1. Select the disk and right-click the disk select **Rebuild MBR**;
2. Set the type of MBR for current OS;
3. Click **Apply** on the toolbar to commit the changes.

Note:
This feature is usually used on system disk. When you encounter system could not boot, you’ll need to connect system disk to another machine, then in the toolbar select **Wizard** -> **Make Bootable CD Wizard** to build a bootable device to fix this problem.

Delete All Partitions

The feature will delete all partition on a disk, and you also wipe all data on the disk to ensure that the data can not be recovered by any data recovery solution.

1. Select the disk that you want to clear in main window, and click the **“Delete All Partition”** option in right menu to invoke the related dialog.
2. Select the deletion method in the pop-up dialog, you can:
   a) Just delete all partitions on a hard disk (without wiping disk sectors)
   b) Delete all partitions and fully wipe partition sectors (The all sectors of the partition will

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be full 0). This can ensure that the data recovery software can not recover the data on the disk.

3. By clicking OK you'll add a pending operation of clear disk, and the disk will become a full unallocated space, and then this will be graphically represented in the main window.

Note:
If the current disk is a system disk, we suggest you do not clear the system disk. Otherwise, your PC can not boot on the next time.

Convert to MBR/GPT Disk

This feature could help you convert a disk with data into GPT or MBR style without data loss. Usually，there are two cases that you need to do this conversion:

1. Owing to MBR disk could only support using up to 2TB disk size, if you have a disk larger than 2TB size, the rest of the disk space could not be used unless you convert it to GPT style;
2. Generally speaking, when you encounter “GPT protective partition” that could not be accessed by XP 32-bit Version or other low-level OS, you could convert it to MBR disk.

To convert a disk to MBR/GPT disk

1. Select the disk to convert;
2. Right click the disk and select **Convert to GPT/MBR Disk**;
3. Confirm your operation, by clicking “OK” to continue;
4. Click **Apply** button on the toolbar to commit the changes.

Note:

- For a less than 2TB GPT disk, you can only convert 4 partitions at most to MBR disk. Because of the limit of MBR disk only support 4 primary partitions. If the number of partitions is more than 4, you’ll need to adjust them to meet this condition.
- For a system or boot disk, before converting it to GPT disk, we suggest that you make sure whether your motherboard supports EFI/UEFI boot or not, if does not support, please don't convert it to GPT disk.

Wipe Hard Drive

Wipe hard drive will delete all partitions and erase the data completely to ensure the data can not be recovered by any data recovery solution. This function can prevent undesired recovery of your deleted data.

To wipe hard drive

1. In the disk map, select the disk which you want to wipe;
2. By right clicking the disk select **Wipe Hard Drive**;

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3. In the popup window, enter a proper value. This value means how many times you want to wipe this hard drive. Click **OK** to continue;
4. Click **Apply** button on the toolbar to commit this operation.

Note:
You can specify the number of times to wipe from 1 to 100.

Initialize Disk

When you buy a brand new drive, you'll need to initialize it to MBR style or GPT style and then you can continue to use this disk.

To initialize disk

1. When you connect the brand new disk on computer, launch **Partition Assistant**, in the disk map select this disk;
2. By right clicking this disk select **Initialize Disk**;
3. In the popup window set up disk style MBR or GPT, click OK;
4. Click **Apply** button on the toolbar to commit this operation.

Note:

- If your disk is larger than 2TB, we suggest you initialize to GPT style, so that you can make full use of the disk space.
- If your disk is smaller than 2TB, initialize to MBR style will be much better.

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Wizard Operations

Disk Copy Wizard

Disk Copy Wizard is a shortcut to help you copy to another disk from one.

To copy a disk

1. Select the right method you want (e.g. Copy Disk Quickly) then click "**Next**".
2. Choose a disk you want to copy as the source disk, and click "**Next**".
3. Choose a target disk to copy the source disk and then click "**Next**". Note at the left bottom, there is an option -- **Optimize performance for SSD**. This feature could help you speeding up Solid State Drive's (SSD) read and write speeds, improving SSD performance. If you fit that detail, select this option.
4. Edit Disk by choose different copy options. Click "**Next**"
5. Read the note about "How to boot partition from the destination disk" and click "**Finish**"
6. Click Apply on the toolbar to commit the copy operation.

Note:
You could not choose the dynamic disk as the source disk and destination disk.
The size of destination disk lie on the method you take.

- "**Copy Disk Quickly**": only copy used space of the disk to another disk. The destination disk could be smaller than source disk but must be larger than the used space.
- "**Sector-By-Sector Copy**": copy all sectors of the disk to a target disk no matter whether it is used or not. The destination disk must be equal or larger than source disk.

Partition Copy Wizard

Partition Copy Wizard is a simple way to help you copy partition; it could help you rapidly enter the navigator window of partition copy.

To copy a partition

1. Select the suitable method you want (e.g. Copy Disk Quickly) and click "**Next**";
2. Select a partition (except unallocated partition) that you want to copy as source partition then click **"Next"**;
3. Select an unallocated space as destination space and click "**Next**". Note at the left bottom, there is an option -- **Optimize performance for SSD**. This feature could help you speeding up Solid State Drive's (SSD) read and write speeds, improving SSD performance. If you fit that detail, select this option;
4. Adjust the partition include: the type, the drive letter and the partition size. Click "**Finish**" to complete operation;

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5. Click **Apply** on the toolbar to commit the copy operation.

Note:
The size of the destination space is depended on the different method you choose.
- "**Copy Partition Quickly**", the destination space could be smaller than the source partition but must be larger than the used space.
- "**Sector-by-Sector Copy**", the destination space must be equal or larger than source partition.

Extend Partition Wizard

Extend Partition Wizard is a useful utility, which is able to extend your system boot partition and other partitions. It can fully use the free space and unallocated space on the disk to meet your needs. The program automatically shrinks large partitions and moves them to release more space to increase the capacity for the given partition. It's easy and safe without loss of data, without formatting partition and without restarting computer.

To extend a partition

1. Select a partition that you want to extend (the program make the "extend system partition" your default), and click the **Next** to enter into a welcome screen. Please skip the screen to the "Select Partition" page.
2. Then, you need to select the partitions that will shrink in order to release free space in a list box, and click the **Next**.
3. Specify the new size of the partition which you are extending and click the **Next.**
4. Preview the layout of your current disk and confirm the operations and click the **Proceed** to begin work. Here will popup a Message Box that prompts the operation time estimated, you need to click OK to continue.
5. Operations are executing and then report when operations are completed.

Note:
When the operation is being executed, some shortcuts may be unavailable and your running programs may be closed. These are only temporarily and do not effect the run of your system. If you need to extend a FAT system partition, it is required to convert the FAT to NTFS first.

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Migrate OS to SSD or HDD

Migrate operating systems from old hard drive to new SSD or HDD, boot from SSD or HDD, do not need reinstall OS and any other registered applications. It could also help you solve the "system disk space insufficient".

To migrate OS

1. Click **Wizard->Migrate OS to SSD or HDD**. Then in the pop up window click "**Next**" to continue;
2. Choose an unallocated space as destination on the SSD or HDD to migrate your operating system to the space. Click "**Next**".
3. Adjust partition size by dragging the slider leftwards or rightwards or directly clicks "**Next**" to continue;
4. Read the note, it teaches you how to boot. Click "**Finish**" to continue;
5. Click **Apply** on the toolbar to commit the migration operation.

Note:

- This feature could also help you solve the "system disk space insufficient", in this case means migrate the small system disk to a larger disk.
- Only unallocated space could be set as destination.

Partition Recovery Wizard

Recover deleted or lost partitions from the selected disk. As some incidents may cause partition loss, the data in the partition will also be lost. In this case partition recovery wizard could help you recover the lost partition and retrieve the data.

To recover partition

1. Select **Wizard->Partition Recovery Wizard**;
2. Select the disk to recover partitions, click "Next" to continue;
3. Choose search mode and click "Next" to continue;

    - Fast search: (recommended) this mode will quickly find out deleted or lost partitions, by searching the first sector of each partition of the selected disk.
    - Full search will more in-depth search every sector on the selected disk. So it need more time, you could choose this method when using Fast Search fails.

4. After all the deleted partition been found, it will be listed in the window. Double click the partition to explore the content to see whether it is the one you want to recover. And then tick the partitions you want to recover, click Proceed to start the recovery operation;
5. After the partition recovery completed, you can explore the recovered partitions in "My

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Computer".

Note:

- This feature could only support recovering lost partitions from the select disk. If the partition has files, after the partition been recovered, the files will also come back automatically. If you want to recover files from formatted, corrupted partition, please use data recovery software.

- The recovered partitions may have no drive letter. If so, you could not see the partitions in "My Computer". In this situation, please reboot computer and then launch AOMEI Partition Assistant manually assign a drive letter to the partition by right clicking the partition -> **Advanced** -> select **Change Drive Letter.**

Make Bootable CD Wizard

Burn Partition Assistant into bootable CD/DVD or USB device, and boot from bootable device to manage hard drive, thus you can conveniently manage a mass of computers without directly install the software on these machines. Or when your operating system fails to boot, you could also boot from bootable device to manage your hard drive to repair the problems.

To create bootable CD

1. Select **Wizard**-> **Make Bootable CD Wizard**;
2. To create bootable CD, at first your system should have been installed Windows AIK. If not the program will prompt you with a link to download Windows AIK. After the installation, click **Next** to continue;
3. Select a path to save the ISO file will be created (the program will make Desktop your default path), and click **Proceed** to generate this ISO file;
4. Waiting for a few minutes, the file will be created successfully in your selected path, and then use 3-rd party tool to burn the ISO file to CD/USB device;

NTFS to FAT32 Converter

NTFS to FAT32 Converter is a professional file system conversion utility. It allows you to convert file system from NTFS to FAT32 (vice versa) without erasing data and converting NTFS partition which is larger than 32GB to FAT32 is no longer a problem. At the meantime, in the process, compressed and encrypted files featured with NTFS can be decompressed and decrypted automatically to fit for the characteristic of FAT32.

Case 1: Convert NTFS to FAT32

1. Run "NTFS to FAT32 Converter" in the left "Wizard" panel;
2. Select the option "NTFS to FAT32" and then click "Next" to continue;
3. Select a partition which you want to convert and click "Next", after that, the program will firstly analyze the partition to see if there are compressed and encrypted files. At last, it will allow you directly process the files just by clicking "Start to decompress there compressed

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files" and "Start to decrypt these encrypted files";
4. Confirm the information and then start the conversion by clicking "Proceed";
5. The conversion is being executed, and you will receive a message after completing the conversion.

Case 2: Convert FAT/FAT32 to NTFS

1. Run “NTFS to FAT32 Converter" in the left “Wizard” panel;
2. Select the option “FAT32 to NTFS” and then click “Next” to continue;
3. Then, enter into the "FAT Partition List" page. Please select a FAT/FAT32 partition that you want to convert and click “Next”;
4. Confirm the information and start the conversion by clicking "Proceed";
5. The conversion is being executed, and you will receive a message after completing the conversion.

Note:

- We highly suggest you run chkdsk.exe to check and fix potential errors before the conversion, since the error file will be excluded in the conversion process.
- When converting NTFS to FAT32, you have to copy any single files whose size are greater than 4GB to any other proper place due to FAT32 file system doesn’t support it.

Dynamic Disk Converter

Dynamic Disk Converter is specialized for converting a dynamic disk back to basic disk without data-losing. Also ensure Operating System is bootable after the conversion. Its friendly user interface makes you use it more easily and efficiently. Its high security makes your data be protected during the conversion process.

To convert dynamic disk

1. Run “Dynamic Disk Converter” in the left “Wizard” panel;
2. Select one of the methods to continue. Two detailed solutions are as follow:

Case 1: Method 1

1) Select the dynamic disk which you want to convert to basic disk;
2) To ensure data security, if any partitions will loss in the process, you will be prompted by the software. If so, please back to use Method 2 to convert those will loss volumes;
3) Confirm that it is the disk you want to convert and then tick the option “I have decided to execute this option…” to continue;
4) Converting...
5) Report the result of the conversion and then you need to restart the computer to take effect.

Case 2: Method 2

1) Pick a source dynamic volume which you want to convert/copy to basic disk and then click “Next” to continue;

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2) On any other basic disks select an unallocated space to hold that a source dynamic volume;
3) Confirm that it is the volume which you wish to convert and press “Proceed” to start converting;
4) The conversion is being executed...
5) Report the result of the conversion.

Note:
Due to the characteristic of basic disk, Dynamic Disk Converter cannot directly convert the spanned, striped, mirror and RAID volume to basic partition. Therefore you need to use Method 2 to convert them to basic partition.

Windows To Go Creator

Windows To GO Creator is a user friendly wizard which can help you distribute Windows 8 to USB removable devices with easy. And with its help, you can create your own Windows 8 USB bootable drive on any computer as long as you have a Windows 8 (any version) installation image.

To create Windows To GO

1. Preparing for creating Windows To GO, you’d better prepare a windows 8 installation CD or extract the installation file of Windows 8 to a proper place. Here we suggest 3 methods:
   1) If you have a Windows 8 installation DVD, you can directly insert it in DVD -ROM and then continue.
   2) Extract your Windows 8 installation file (ISO) to a proper place with WinRAR or WinZIP.
   3) Mount Windows 8 installation file (ISO) as virtual drive by using 3-rd party mount/burning software such as DAEMON Tools Lite.

2. Run “Windows To GO Creator” in the left “Wizard” panel;
3. Select a USB device and then click “Browse” to locate Windows 8 installation file;
4. The program will automatically detect if there is a Windows 8 installation disc (including virtual disc, if you have mounted the image before) in the DVD-ROM. Next, it will list the bootable Windows installation file in the window. If there is no Win8 installation disc, please click “Browse” button and go to the directory where you extracted Windows 8 installation ISO file.
5. After that, select the Windows 8 installation file (named “install.wim”) and then click “OK” button to continue;
6. Confirm the operation and click “Yes” to start creating Windows To Go.

Note:
- You need at least 13GB disk/partition space for creating Windows To GO.
- The program will format the partition which you select as destination in the process, so please backup your data first.

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Technical Support

FAQ

Common Error and Solution of Extend Partition Wizard

Error Code 1004: The partition cannot be locked in the wizard; please reboot and retry, or you could try to resize the partition in Partition Assistant Main Console.

Q: Why the partition need be locked first? Why the partition could not be locked?
A: In order to protect the data, and keep the data integrate, lock partition could keep from other applications visit the target partition during the operation. In some situations the partition could not be locked, the main reason is some system services, antivirus, firewall or other applications which were ruing on the target partition and this prevent Partition Assistant to lock the partition.

Solution:
You'd better check out the application and shut down. (Note: you'd better shut down all the Antivirus Program or other protection software before launch Partition Assistant). Or let Partition Assistant resize the partition under the Main Console. If the software detected that the partition could not be locked the software would ask for rebooting, and the operation will be completed under the PreOS Mode. (Learn more about PreOS Mode).

Error Code 1029: There is an issue during extend the partition with the wizard; you could try to extend the partition in Partition Assistant Main Console.

Q: What cause error Code 1029? How to solve this problem?
A: This error code is caused by the "Extend Wizard" could not resize the partition directly.

Solution:
To solve this problem, you could only resize the partition under Partition Assistant main console. After resizing the partition, and when you click "Apply" to commit the operation, you need also hold down the "Shift" button and let the operation completed under the PreOS Mode. (Learn more about PreOS Mode).

Error Code 1030: The program detected the Paging File (pagefile.sys) is on your target partition. To commit the operation please remove the paging file first.

Q: What cause error code 1030? How to change page file?
A: This error code is caused by the page file. Extend Partition Wizard could not handle any partition which contain the page file.

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Solution:
You need to first remove the page file to the partition that you want to resize. (You could Right click "Computer"->"Properties"->"Advanced system settings"->"Performance Settings" -> "Advanced" -> "Virtual Memory Change".) You could read more details about "How to remove Page file?"

Q: I receive the Error Description: "The wizards only extend a NTFS partition, but detected that your partition isn't a NTFS" by using "Extend Wizard"? How to deal with it?

A: "Extend Partition Wizard" does not support any FAT or FAT 32 partitions resizing directly. To solve this problem you need to convert your partition from FAT or FAT 32 to NTFS first by using the command line (convert drive letter: /fs:NTFS) or you could resize the FAT or FAT 32 partition on the main console of Partition Assistant directly.

Q: I get the Error Description: **"**Sorry, the program doesn't extend this partition yet because of the free disk space insufficient. We recommend you try to extend the partition in Partition Assistant Main Console". How could I solve it?

A: This error always appears when the partition you want to extend was at the end of the hard disk, to solve this problem; you could only extend the partition on main console of Partition Assistant.

Q: What is the Error Description: If in your system there is a bitlocker volume, you need to turn off the bitlocker, and then you can extend the partition again. Besides, we recommend you try to extend the partition in Partition Assistant Main Console.

A: Extend Partition Wizard does not support resizing any bitlocker volume; therefore, you could only turn off the bitlocker first. Learn how to deal with a bitlocker partition?

Q: I get the Error Description: The wizard does not support to extend partition on a GPT disk; you can extend the GPT partition by using Partition Assistant Main Console. How could I solve it?

A: Extend Partition Wizard does not support any GPT hard disk, if you want to resize partition on GPT hard disk; you need to resize it on main interface of Partition Assistant.

Common Error and Solution of Partition Assistant

Q: In the case of double system (XP and Win9X) environment, you move/resize the partition of Win9X under the XP environment. At last, you can't start Windows9X. Why?
A: It is directly related to the characteristics of Win9X because the Win9X partition can't be resized or moved. That's why we strongly advise you don't resize/move the old Windows9X. Otherwise, it will cause a lot of problems.

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Q: The program is not response when locking volume, how do I?
A: You can forcibly terminate the program by using Task Manager, and re-run the Partition Assistant, redo the operation before. When press the Shift key, and click the Apply button on toolbar to solve the lock issue volume.

Q: I get the error code 215 during merging partitions, how to solve it?
A: This problem is caused by the fragment data or the low free space on the target partition. If there are too large numbers of fragment data on the target partition, or the free space on the partition is smaller than 512mb then you will get this error code. To solve this problem, you need to do a complete defragment (you could refer to how to do a defragment?). Or you need reserve the enough free space during shrink partition.

Q: I get the error code 43 during merging partitions?
A: This error code is caused by some file which could not be accessed, to solve this kind of problem, you could open the "Log file" of Partition Assistant and to find out which file was not able to access and then you could copy them to another partition.

Note: If you get this error code under "PreOS mode" you should go to "C:\Windows\amlog" and find the file "ampa.log". If you get this error code under "Windows mode" you could find the the log file under the installation file of Partition Assistant.

Q: After the operation complete, I can't find my drive in "My computer", how to solve it?
A: If you can not find the drive in "My Computer", this problem may caused by the loosing drive letter. To solve this problem, you could launch Partition Assistant, on the main interface, right-click the partition which has no drive letter (if a partition has no drive letter it will show as "*") use the feature "Change drive letter" to assign a drive letter.

Q: When I right-click partition C, the option "Split Partition" and "Create Partition" are grayed out, how to active them?
A：This situation always cause by the numbers of the primary partition. If you have four primary partitions already, to solve this problem, you need to change one of your primary into logical partition (refer to the section: Convert primary/logical partition). After that the option will be reactive.

Q: During the process of converting the GPT disk to MBR disk, why the program prompt that some partitions will lose after the conversion?
A: The number of partitions on this disk is greater than 4, so it can not be converted to MBR disk. We suggest you delete some unused partitions, and try again. Because of the limit of MBR disk only support 4 primary partitions. You can only convert 4 partitions at most to MBR disk. If the number of partitions is more than 4, you'll need to adjust them to meet this condition.

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Support

If you have any question about disk partition management, please do not hesitate to send an e-mail to support@aomeitech.com or visit http://www.disk-partition.com

Useful URL:
Online Tutorials: http://www.disk-partition.com/tutorials.html
Online FAQ: http://www.disk-partition.com/help/faq.html
PreOS Mode: http://www.disk-partition.com/lib/PreOS-mode.html
How to remove Page file: http://www.disk-partition.com/lib/remove-pageing-file.html
Main console of Partition Assistant: http://www.disk-partition.com/lib/pa-main-console.html
Deal with a bitlocker: http://www.disk-partition.com/lib/decrypt-bitlocker-partition.html
How to do a defragment: http://www.disk-partition.com/lib/how-to-defragment.html

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